

than when the plants grew beside the pond. The place has been fenced in ever since and used either for hens or pigs or both, and yet through all this time to the present day the plants have continued to thrive.

I first saw this Button-bush on the Philbrook Farm in the summer of 1882. It was growing in a thick clump, some four feet high, the bushes were in full flower and the hens sought shelter from the hot sun under the shady branches. The next time I saw the plants was in October of the present year, fifteen years since my last visit. On repairing to the spot I found the conditions in no wise changed. The little yard was still there, fenced in as formerly. Fifteen little pigs and some hens were roaming about the enclosure. There on one side within a space thirty-three by twenty-eight feet in extent grew the Button-bush. I counted as many as seventy stems rising above the ground which was dry and hard as formerly, and packed closely about the plants by the many feet of the strange companions of these water-loving shrubs. They were from three to seven and one half feet in height, and were setting a good crop of fruit. Mr. Philbrook who has kindly given me the early history of this plant says that the roots are at least six feet below the surface of the ground, but that at that depth the soil is always wet in this particular locality. In this respect only does the plant in any degree follow the normal habit of the species. The shoots of the Button-bush are not so numerous as they were a few years ago, but this is due to the fact that they receive pretty hard treatment from the pigs that root about the stems and rub continually against them. The hens also pick at the young shoots within reach. Still for thirty-seven years under these unnatural conditions have the plants flourished and, if unmolested, there seems to be no reason for putting any limit to their vitality.

CAMBRIDGE, MASSACHUSETTS.

A CRISTATE FORM OF NEPHRODIUM MARGINALE.

F. G. FLOYD.

VERY few of our New England ferns have been found crested. Perhaps this is partially accounted for by the fact that this phase of abnormal growth is a branch of fern study that has not, until quite recently, interested American collectors. That these cristate varie-

ties are not so rare with us as is usually supposed but are simply overlooked I have been led to believe by my observations on bifid and trifid fronds. This latter form of development is quite frequent although not generally considered so. Where I find a species in abundance it is seldom that a careful search fails to disclose at least one frond of this character.

I was on just such a search among *Polypodium vulgare* when my attention was arrested by a peculiar plant of *Nephrodium marginale*, Richard and on closer inspection I found every frond was crested. Evidently the plant was quite young for the fronds were few and of medium size and the crown was small. I was unable, after a careful examination, to detect anything in the environment of the plant that would account for its assuming this peculiarity. It grows, surrounded by its fellows, apparently under similar conditions.

When the plant was discovered the season of 1901 was well advanced, but several of the fronds of previous years persisted about the base showing unmistakably that they were cristate. The station was again visited this year (1902) and another crop of similar fronds found. As the variation appears to be permanent it seems advisable to give the fern formal recognition and I take pleasure in naming it in honor of our well-known pteridologist, Mr. George Edward Davenport.

NEPHRODIUM MARGINALE, Richard, forma **Davenportii**. Fronds similar to those of the species in outline and lobation. The apex and tips of lower pinnae bearing tassel-like enlargements produced by the dividing of the rachis into two or more parts; these being again parted and these segments once or twice cleft, thus forming a series of short, overlapping, crowded and somewhat spreading parts.

The plant was found in Milton, Massachusetts, in an unfrequented part of the Blue Hills Reservation. Specimens are deposited in the Herbarium of the New England Botanical Club, the herbarium of Geo. E. Davenport and in my own herbarium.

WEST ROXBURY, MASSACHUSETTS.

RARE PLANTS IN CENTREVILLE, MASSACHUSETTS.

CLARA IMOGENE CHENEY.

VERBENA HASTATA, forma **rosea**. Habit, stature, foliage, etc., as in the typical form; corolla bright rose-colored.—Centreville, Massachusetts.